

MAGNETORESISTIVE SENSOR**ABSTRACT OF THE DISCLOSURE**

In a method of forming a magnetoresistive sensor, first and second magnetic leads
5 are formed. Next, a junction of magnetic and electrically conductive material is formed
between the first and second magnetic leads. Finally, the magnetic and electrical
conductivity of an outer shell portion of the junction is reduced to form a constricted
junction comprising a magnetic and electrically conductive junction core that is at least
partially surrounded by the outer shell portion. Another aspect of the present invention is
10 directed to the magnetoresistive sensor that is formed using the method.